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Education: Innovative Financing in Developing Countries

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Education: Innovative Financing in Developing Countries

Harry Patrinos and Nobuyuki Tanaka

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Abstract

Despite efforts to generate more funds for education, current financing in the education sector is inadequate, inefficient, and inequitable to ensure quality education and improve learning outcomes. One way to fill the financing gap is “innovative finance,” which means not only sourcing new and additional funds but also spending these funds efficiently and effectively. Blended finance, one type of innovative finance, uses public funds to attract private capital to sustainable development projects by minimizing their risk. The use of blended finance has spread over the past decade in the energy sector for example, but there is scope for it to be applied more widely in the education sector.

JEL: G23, H41, O1, Q01, Q14

Keywords: Education, finance, blended finance, innovative financing

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I. Introduction

Investing in education is crucial for economic growth and poverty reduction. Education is not only an investment in individuals but also in society. Research has shown that each additional year of schooling can increase earnings by approximately 10 percent (Psacharopoulos and Patrinos, 2018 and Montenegro and Patrinos, 2023). However, all individuals and societies do not always fully realize the benefits of education. On a global scale, learning outcomes were already low before the pandemic, and they have further deteriorated as a result of the missed learning opportunities caused by COVID-19-related school closures. It is now estimated that 70 percent of 10-year-olds are unable to read and comprehend a simple text (World Bank et al, 2022).

Governments, households, and international development agencies have all been providing funding to tackle this long-standing learning crisis and to accelerate the recovery of pandemic learning losses, but the amount provided has proved to be inadequate for the size of the task. Before it will be possible to provide quality education on a global scale capable of reversing learning losses and building human capital, it will be necessary to find ways to fill a substantial education financing gap (UNESCO, 2023).

On average, governments spend 3 to 5 percent of their gross domestic product (GDP) on education from pre-primary to tertiary. This represents 10 to 20 percent of their total government expenditures. The contributions made by households to education financing are substantial, especially in low-income countries (LICs) and lower-middle-income countries (LMICs) where families provide roughly one-third of all education expenditures. This financial burden is particularly heavy for poor households (World Bank and UNESCO, 2023). Although funding for education from international development agencies has never been more critical, it is in decline, having decreased by 7 percent from US\$19.3 billion in 2020 to US\$17.8 billion in 2021 (World Bank and UNESCO, 2023).

In the current climate where financial resources are tight for governments, households, and international development agencies, it is crucial to find more efficient and innovative funding strategies to close the education financing gap. This paper aims to identify potential innovative financing approaches to reversing the learning crisis and filling the funding gap to inform funders of education, including governments, development partners, and investors.

II. Innovative Approaches to Closing the Education Financing Gap

Continuous efforts have been made to explore innovative and unconventional approaches to increasing the amount of funding available in the education sector. These efforts have focused on innovation in both domestic and external sources as well as on how education is delivered and resources are mobilized (Burnett and Bermingham, 2010). An innovative financing mechanism should not only generate extra funds but also help to transform the education sector by mobilizing more domestic resources, using development aid more effectively, encouraging innovation, and elevating the performance (Writing Committee to the Taskforce on Innovative Financing for Education, 2010).

Innovative financing encompasses a wide range of mechanisms. While standard definitions elude us (see Box 1), examples include blended finance (Roddis, 2020 and Convergence, 2022); debt swaps in the education sector (Saravanamuttoo and Shaw, 1995; UNESCO, 2009; Cassimon et al, 2011; UNESCO 2011;

Ito et al, 2018; and GPE, 2023), income contingent loans in higher education (Chapman, 2016 and Chapman and Dearden, 2022), public-private partnerships (Patrinos et al, 2009; Arcia et al, 2023; and Patrinos, 2023), including private sector/ non-state education provision (Baum and Lewis, 2014 and UNESCO, 2021), results-based financing (World Bank, 2015; Lee and Medina, 2019; and Cruz, 2022), and skills development levies (Dar et al, 2003; Johanson, 2009; Palmer, 2017; Palmer, 2020; UNESCO, 2022; and World Bank et al, 2023).

1. Innovation in mobilizing more domestic and international financing (increasing volume)

There are several key kinds of innovations that can be used to increase the volume of domestic and international education funding.

- a) **Blended finance.** In blended finance, development funding is deployed strategically to attract additional sources of private capital to activities aimed at achieving development goals while also reducing risk and yielding potential financial returns. This approach is currently being used in various sectors, including the education sector. Blended finance can be implemented using various types of instruments.
- b) **Debt swaps for education.** This mechanism involves creditors forgiving a country's debt in return for its commitment to mobilize more resources for education spending (UNESCO, 2009). Some countries have used this strategy to open up the necessary fiscal space to increase spending on education (Box 2).

Box 1. There is no Standard Definition of Innovative Financing

There is no standard definition of what approaches constitute innovative financing. For instance, Filipp and Lerer (2013) reviewed 10 mechanisms, including global taxation, debt contract securitization for bonds, social impact bonds/development impact bonds, debt swap, IDA buy-downs, debt conversion development bonds, advance market commitments, impact investing, blended instruments, and microfinance and insurance. Bellinger et al (2016) assessed 18 innovative financing mechanisms, including the global financing facility, education bonds, outcomes-based financing, loan buy-downs, student financing, risk financing, social impact investing (other than social and development impact bonds), global solidarity levies, remittances, school/provider financing, corporate levies, debt conversion development bonds, debt swaps, advanced market commitments, diaspora bonds, crowdfunding, social yield notes, and product-based consumer contributions. Another issue in classifying innovative financing mechanisms is the overlap between certain terms. For instance, an impact bond can be categorized under blended finance, public-private partnerships, or results-based financing.

- c) **Guarantees.** Overall, guarantees have the potential to stimulate increased investment in developing countries by protecting investors against various commercial, contractual, regulatory, political, macroeconomic, and currency risks (MIGA, 2023). In education, the International Finance Facility for Education (IFFEd, 2024) was launched in 2023 to amplify donor resources and narrow financing gaps in LMICs. The IFFEd combines guarantees and grants to mobilize additional funding for education with the aim of generating a minimum of US\$10 billion in new education financing over the next five years.
- d) **Skills development levies.** Some training programs are funded by innovative levies from diverse sources such as a withheld percentage of the payroll; company profits, turnover, or sales; taxes or fees on foreign worker permits; or a fixed-rate payment from each employee. As of 2020, various kinds of training funds financed by levies existed in 75 countries (UNESCO, 2022).

2. Innovation in service delivery (increasing efficiency)

There are also several innovative ways to make the financing of service delivery more oriented to results.

- a) **Impact bonds.** The growing interest among governments in attracting private investment to prefinance the achievement of desired outcomes has led to an increase in the use of impact bonds. Out of the 253 impact bonds that currently exist, only 32 are in LICs and in middle-income countries (MICs). Among these, 11 focus on the education sector (Brookings Institution, 2023). In practice, these impact bonds are outcomes-based arrangements in which the outcome funder repays the investor who provided the upfront capital if and when the outcomes are achieved. The term impact bond is a misnomer as these are not actual bonds. They are not a fixed-income borrowing instrument (or a contract), and they cannot be traded. Within a well-defined, measurable program, the investor provides the upfront capital to service providers to deliver high quality services to the population in need. After an independent agency has verified that the desired results have been achieved, the outcome funder repays the investor at a premium. In this way, the investor can generate a return on its investment, but the public sector only pays if the results are successfully achieved, thereby transferring the performance risk from the public to the private sector. See Box 3.

Box 2. Country Examples of Debt Swaps in the Education Sector

Debt swaps for development, including debt swaps for education, had gained traction from the 1980s onwards, but recently enthusiasm for such financial innovations appears to have waned. However, several nations have had some experience with implementing these innovative financing mechanisms:

- In 2000, *Germany* entered a pioneering debt-for-education swap deal with *Indonesia*. The first agreement, signed in 2002, involved a sum of EUR26 million allocated for initiatives in Indonesia such as teacher training, and school construction and the purchase of equipment. A second arrangement signed in 2004 resulted in Germany forgiving Indonesia EUR23 million in bilateral debt.
- In 2005, *Spain* cancelled US\$10 million in debt from *El Salvador* over a period of four years, using debt swap agreements to fund the building of rural schools, the development of school libraries, and the purchase of textbooks.
- In 2006, *France* agreed to reallocate EUR1.2 billion of *Cameroon*'s debt to education programs. The first segment amounted EUR537 million, of which EUR90 million was specifically designated for education and used to hire contract teachers and construct schools.
- Recently, the Global Partnership for Education (GPE) created its Debt2Ed initiative, which converts countries' debt obligations into funding for education investments. This alleviates their debt burden, decreases their borrowing costs, and facilitates more efficient spending for education programs.
- In 2023, *France* and *Côte d'Ivoire* entered into a debt-for-education swap agreement under the Debt2Ed program, amounting to US\$77.1 million. Under this agreement, Côte d'Ivoire will adhere to the established debt repayment schedule with France, but the French Development Agency (*Agence française de développement*, AfD) will convert the equivalent amount of each repayment into a grant for Côte d'Ivoire's education sector, thereby earmarking a total of US\$77.1 million specifically for education programs.

Source: Cassimon et al (2011), UNESCO (2011), Ito et al (2018), and GPE (2023).

Box 3. Review of Impact Bonds in Education

A recent systematic review of the use of impact bonds in education in LICs and MICs assessed their effectiveness and compared them to other results-based financing (RBF) methods. The study's main findings were as follows:

- Impact bonds offer unique advantages by reducing the financial risks faced by service providers, which may lead to a more diverse provider base and encourage a more innovative and adaptive approach to performance-based contracts, given investors' risk tolerance.
- The success of impact bonds is hinged on strong stakeholder buy-in, favorable legal and financial conditions, and the existence of a thorough database on which to build a strong business case for investing in education. It is also vital that local providers and intermediaries have adequate capacity to achieve the desired outcomes. These elements, while not always present in LICs and MICs, can be cultivated through strategic engagement, capacity building, and data gathering before launching an impact bond.
- While existing education impact bonds in LICs and MICs have met their key performance targets, it is not certain whether these goals could also have been achieved using other funding models given the lack of research. Although impact bonds may encourage a stronger focus on outcomes and collaboration, they often have higher upfront costs than other modes of funding. The lack of sufficient examples of impact bonds in education and of any comparable outcome data means that their financial efficiency remains open to debate.

Source: Elsby et al (2022)

- b) **Income-contingent loans (ICL).** ICLs are loans made to students to cover their tuition and other education costs that they do not need to repay until they are financially able to do so. This protects former students whose incomes remain persistently low from financial hardship. About 10 countries around the world have implemented some version of an income-contingent loan system to cover the costs of higher education tuition (Chapman and Dearden, 2022).
- c) **Public-private partnerships (PPPs) in education.** PPPs in the education sector involve contractual collaboration agreements between governments and the private sector to finance the provision of education services of all kinds (Patrinos et al, 2009). PPPs are most successful when there is a robust supply of resources from the private sector, when funds are targeted for specific uses, when government spending can be reduced without compromising quality, when the PPP takes a comprehensive system-wide approach, and when the provider has autonomy over management and academic matters (Patrinos, 2023).
- d) **Results-based financing (RBF).** This strategy involves any program or intervention that delivers incentives, which can be monetary or in-kind, to providers when they achieve specific outcomes and those outcomes are validated (Lee and Medina, 2019). This approach can motivate stakeholders to improve their performance, including students, families, teachers, schools, education administrators, service providers, governments, and non-state actors. How these RBF programs are designed and implemented is critical to their effectiveness (Cruz, 2022) (see Boxes 4, 5, and 6).

Box 4. Results Based Financing (RBF): Investing in Improving Education Outcomes

Despite the expansion of access to education over the last 20 years, increased access has not necessarily translated into improved quality. This is mainly because pinpointing the exact investments needed to boost student learning has been challenging, which has led to expenditures on activities that do not directly impact learning.

The RBF model, which has been applied in various countries, offers incentives to a range of stakeholders in the education sector to improve their performance, including students, parents, teachers, and the institutions responsible for delivering educational services. These incentives can be offered at any point along the results chain, which includes inputs (such as a set number of textbooks delivered to a school), processes (such as putting in place an effective curriculum), intermediate outputs (such as the number of schools inspected with the reports published on the government's website), and outcomes (such as a demonstrated improvement in student test scores).

Recently, the focus of RBF initiatives has been increasingly shifted away from short-term outputs and towards longer-term outcomes. When designed well, operations that make funding conditional on outcomes can yield greater benefits for project beneficiaries as well as for implementers who are given the flexibility to innovate, learn, and adapt their programs to achieve optimal results.

In a typical RBF, the funds used to run the programs come from the government budget. However, when RBF initiatives combine public and private money, then some or all the risk is borne by the private investors, which means that incentives are needed to persuade private financiers to take on this risk.

Source: GPOBA (2018).

Box 5. RBF using Impact Bonds

The first impact bond adopted by the World Bank in the education sector was incorporated in its Promoting Early Childhood Development Project in Uzbekistan in 2019. It built on the experience of the Bank's Gaza Finance for Jobs II Project, which had included an impact bond related to job creation that was the first to be designed by and implemented with support from the World Bank. The Uzbekistan impact bond was designed to be co-financed by an IDA Credit (US\$6.5 million) and a Global Partnership for Results-Based Approach Grant (GPRBA) (US\$4.9 million). It targeted a support to the operation of 140 private preschools in the lagging regions of Uzbekistan using a set of simple and well-designed results-based payment conditions related to the occupation rate of the supported preschools, the attendance of children from disadvantaged backgrounds, and the quality of the learning environments in the preschools.

The Ghana Education Outcomes Project (GEOP) also built on the Gaza experience. The GEOP Outcomes Fund consisting of US\$30 million is managed by the Ghana Ministry of Education and consists of a US\$25.5 million grant from the UK's Foreign, Commonwealth, and Development Office (FCDO) provided through the World Bank and US\$4.5 million from the Government of Ghana. The GEOP is a component of the IDA-funded Ghana Accountability for Learning Outcomes Project (GALOP), which is dedicated to enhancing educational quality in Ghana by encouraging effective teaching and learning practices.

The objective of the GEOP is to support the reintegration of out-of-school children into Ghana's formal education system and the improvement of learning outcomes in primary schools. The project's expected outcomes of GEOP include: (i) the successful integration of out-of-school children into a mainstream school; (ii) an increase in student retention; and (iii) improvements in student learning. Technical support is also being provided to enhance the government's ability to oversee outcome-based programs.

The government contracted with social investors (Bridges Fund Management and UBS Optimus Foundation via the SDG Outcomes Fund and the Jacobs Foundation) and non-state service providers (Street Child UK, Plan International, and Rising Academies in partnership with School for Life) to deliver the program. Social investors supply the upfront capital when the service providers themselves are unable to do so. Payments are disbursed based on the verified achievement of pre-defined outcomes, which shifts the financial risk from the government to the program implementers. There is a 20 percent additional incentive for achieving outcomes related to expanding girls' education.

These projects demonstrate that education impact bonds can be usefully included in existing World Bank operational policies and procedures.

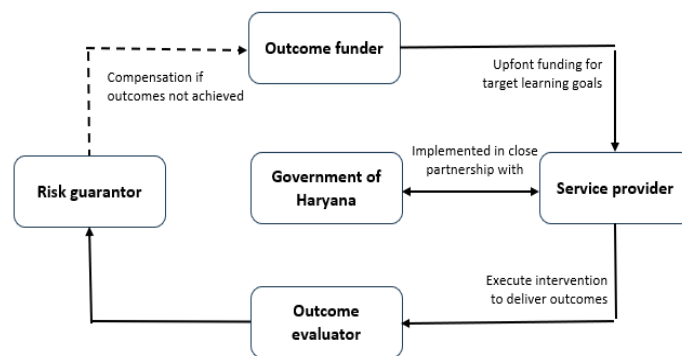
Sources: Edwards (2023), GPRBA (2023a and 2023b), Van de Veen (2023), and World Bank (2019).

Box 6. RBF using Social Impact Guarantees

A Social Impact Guarantee (SIG) provides outcome funders with a safety net whereby they are guaranteed to recoup a portion of their investment if the specified outcomes are not realized. The funder can then retain the refunded amount, reinvest it in a subsequent iteration of the same program, or redirect it towards achieving similar social outcomes in a different program. The first SIG was launched for the Vocational and Soft Skills Programme (VaSSP) in Singapore, which aims to reengage at-risk youths in work and school.

Another example in the education sector is the Haryana Early Literary Development Impact Bond (DIB) implemented in India, which was implemented for three years from 2019 to 2022. It aimed to: (i) improve the literacy outcomes of grade 1 and 2 students across seven districts of Haryana and (ii) enhance the capacity and commitment of the government education system to improve foundational learning outcomes. The program targeted 330 schools, 7,500 educators, and 164,000 children in seven districts in Haryana with a budget of US\$1.9 million. This program was the first-ever DIB in India supported by corporate social responsibility (CSR) funding. The program's key elements were: (i) improving teachers' professional development; (ii) strengthening teacher mentors in the government system; (iii) providing more children's learning materials; and (iv) improving assessment and remediation. At the end of the three-year project, children in the intervention schools could fluently read at 42 words per minute (which meets Global Minimum Proficiency standards), while children in non-intervention schools could read only 30 words per minute. All six pre-agreed outcomes were met, and 1.6 learning-adjusted years of schooling were added. If the pre-agreed outcomes had not been achieved, the risk guarantor would have paid investors back 20 percent of their investment.

Financial structure of the Haryana early literacy program, India



Note: The outcome payers were the IndusInd Bank and SBI Capital Markets (through the SBI Foundation). The risk guarantor was the Central Square Foundation. The service provider was the Language and Learning Foundation, and the outcome evaluator was the Educational Initiative.

Sources: Educational Initiative (2022), IBFC (2023), Language and Learning Foundation (2022a and 2022b), Social Finance India (2020), Tan et al (2021), and Tri-Sector Associates (2023).

III. Blended Finance in Education

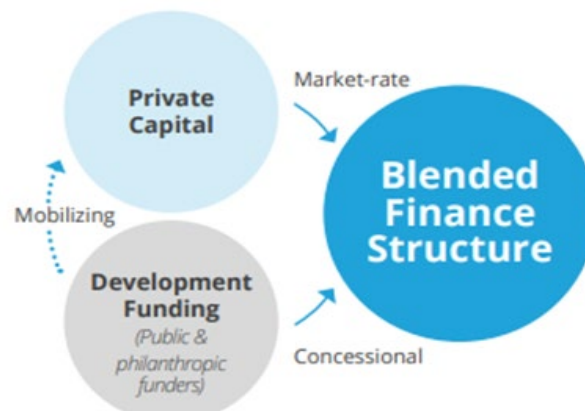
Several of the innovative financing mechanisms in education that were listed above involve the private sector in bridging funding gaps to ensure quality education for all. The crucial question is how development finance institutions (DFIs) can persuade the private sector to invest in activities that prioritize sustainable development (OECD, 2022). One solution that is currently being tried around the world is blended finance, which is a concept specifically designed to attract private sector investors to fill in financial shortfalls.

1. The Concept and Application of Blended Finance

Blended finance involves using development funding strategically to attract additional sources of capital to achieve development goals. In this concept, development funding is deployed in such a way as to persuade private investors to put capital into projects that contribute to sustainable development while also providing them with potential financial returns. A standard definition of blended finance has not yet been established (Roddis, 2020). The OECD defines blended finance as the “strategic use of development finance for the mobilization of additional finance towards sustainable development in developing countries” (OECD, 2024). The definition of blended finance used by USAID is “the strategic use of development funds, such as those from government aid and philanthropic sources, to mobilize private capital for social and environment results, such as improving infrastructure, education, agriculture, healthcare, and more” (Roddis, 2020). Figure 1 presents a schematic of the way in which blended financing works.

Blended finance encourages private investment in development projects by mitigating their risk (Hatashima and Demberel, 2020 and Roddis, 2020). International development agencies leverage their resources and expertise to attract commercial investment into markets, projects, and/or companies that may not typically attract private sector interest (USAID, 2020b). Blended finance enables organizations whose business objectives may be different to invest together in pursuit of a combination of financial returns and social and environmental impact (Convergence, 2023).

Figure 1. Mechanics of blended finance



Source: Convergence (2023).

The involvement of various stakeholders is crucial to the blended finance approach. These stakeholders include but are not limited to: (i) international development agencies; (ii) philanthropic organizations; (iii) recipient governments; (iv) private investors; (v) DFIs; and (vi) multilateral development banks (MDBs) (OECD, 2020c).

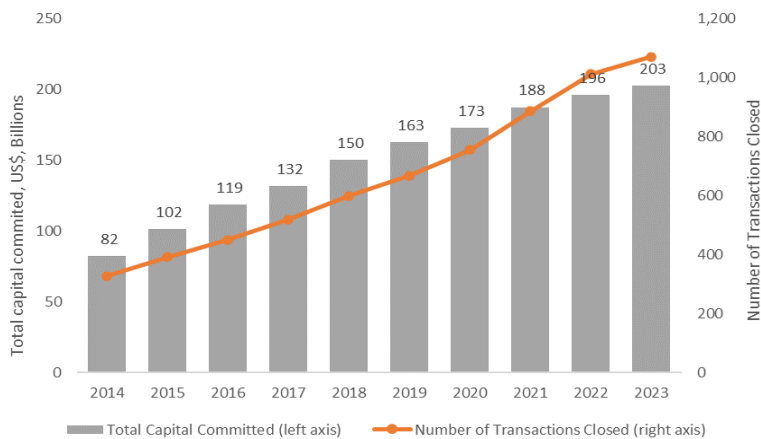
Blended finance has several advantages over traditional project financing in terms of additionality, impact, and returns. Because projects funded by blended finance include risk mitigation elements, this has resulted in a substantial increase in funding from the private sector that would otherwise not have been available (*additionality*). Using blended finance to fund projects ensures that investments promote sustainable development in developing countries (*impact*) but also aim to generate profits for investors (*returns*) (USAID, 2020b). Investing in developing countries carries a high risk and does not always guarantee financial returns. Despite these risks, the impact of such investments is substantial and can

contribute significantly to the development of these countries, and to the wellbeing of the global economy (OECD, 2020a).

In the past decade, the blended finance market has exhibited remarkable growth, reaching almost US\$200 billion in 2023. The amount of capital committed to blended finance mechanisms has more than doubled since 2014, which represents a significant increase in financial resources dedicated to development projects. Additionally, the number of blended finance projects that have been concluded has tripled, rising from 300 in 2014 to over 1,000 in 2023. This growth clearly illustrates the increasing popularity of blended finance as a financing approach for sustainable development projects (Figure 2).

To date, blended finance has mainly been used in the energy and financial services sectors. There has been a slight increase in blended finance transactions in the energy sector from 35 percent in 2010-12 to 44 percent in 2016-18, particularly in renewable energy projects (Convergence, 2019 and Roddis, 2020). In the least developed countries (LDCs), private finance is also concentrated in the energy, banking, and financial services sectors (OECD and UNCDF, 2020).

Figure 2. Growth of annual blended finance activities, all sectors

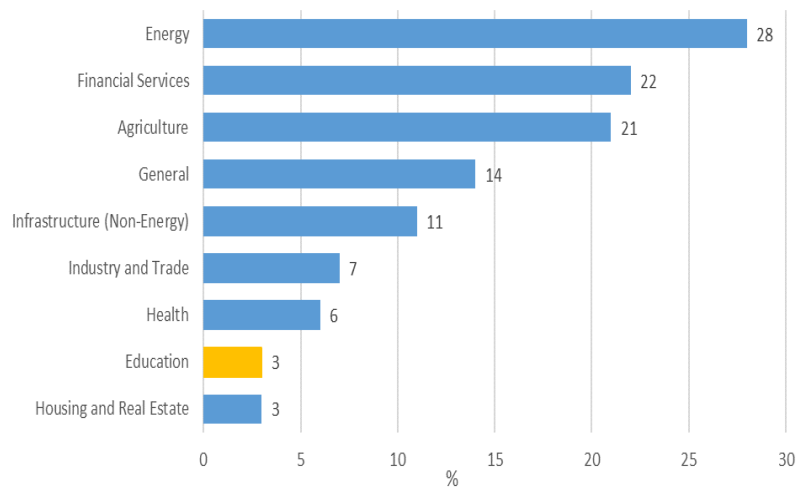


Source: Adapted from www.convergence.finance/blended-finance/. Accessed on January 25, 2024.

2. The Use of Blended Finance in the Education Sector

Blended finance for education is still in the early stages of development (Zelenczuk, 2021). So far only 3 percent of blended finance transactions have been in the education sector, which is significantly lower than the energy and financial services sectors (28 percent and 22 percent), though such investments are slowly increasing (Figure 3).

Figure 3. Proportion of blended finance transactions by sector, %



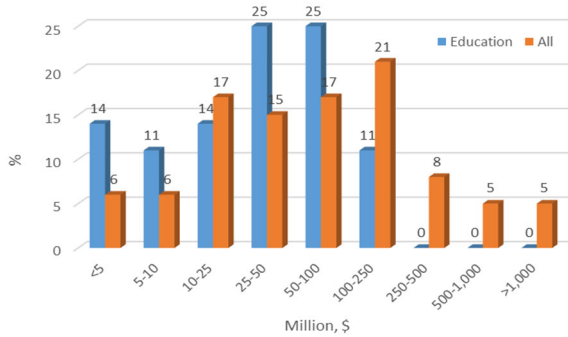
Source: Adapted from www.convergence.finance/blended-finance/. Accessed on January 7, 2024.

2.1 Overview of Blended Finance Transactions in the Education Sector

The blended finance transactions that have occurred in the education sector to date have mostly been used to fund infrastructure. This is clear from the data presented in Convergence (2022), which analyzed 36 blended finance transactions targeting SDG4 (quality education), representing total committed financing of US\$1.46 billion. Over 30 percent of these transactions primarily funded school building projects and small and medium enterprises (SMEs) in the education sector. This finding is in line with those of an OECD survey conducted in 2016 which showed that 52 percent of private finance mobilized in the education sector was spent on building facilities and providing training (OECD and UNCDF, 2019). However, the widespread use of remote learning during the pandemic is also likely to have led to increased blended financing of educational technology (EdTech) (Convergence, 2022).

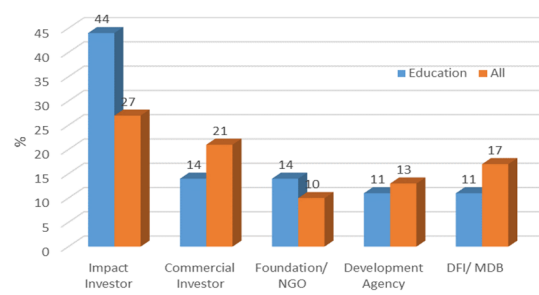
Blended finance transactions in the education sector are generally smaller than those in other sectors. Around 40 percent of transactions in the education sector are less than US\$25 million, while approximately half fall within the range of US\$25 million to US\$100 million. The largest transactions in the education sector typically range from US\$100 million to US\$250 million, with no transactions exceeding US\$250 million. This pattern is in contrast with the overall market where nearly 40 percent of transactions are over US\$100 million, and around 5 percent of transactions are higher than US\$1 billion (Figure 4).

Figure 4. Size of blended finance transactions in education, %



Source: Adapted from Convergence (2022).

Figure 5. Blended finance deal sponsors by type of organization, %



Source: Adapted from Convergence (2022).

As a proportion of participants in blended finance transactions in the education sector, impact investors are the most active, while development agencies and DFI/MDBs participate less. Impact investors account for over 40 percent of transactions, followed by commercial investors and foundations/NGOs, each representing 14 percent of transactions. The respective shares of development agencies and DFI/MDBs of blended finance transactions for education are slightly above 10 percent each. DFI/MDBs have not been as actively involved in blended finance transactions in the education sector as they have in other sectors (Figure 5).

The structure of blended finance transactions in the education sector largely mirrors those in the overall market, with one notable exception: the guarantee and risk insurance structure. In the education sector, the main structure used is concessional debt and equity, which represents 69 percent of all transactions. This closely aligns with the overall market, where it accounts for 68 percent of transactions. However, in the education sector, the guarantee and risk insurance structure accounts for only 14 percent of total transactions, compared with 30 percent of transactions in all sectors (Figure 6).

Figure 6. Share of education sector transaction by blend finance structure, %

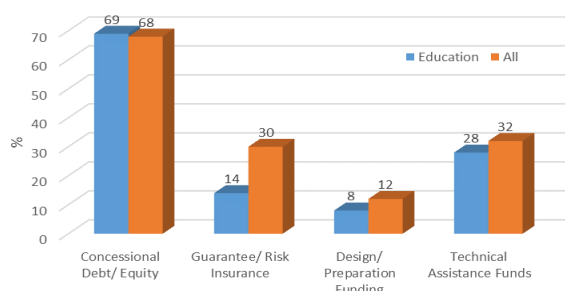
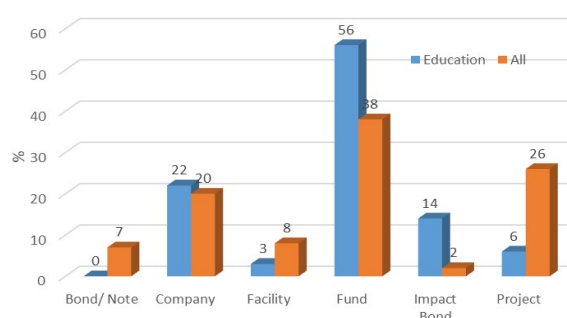


Figure 7. Blended finance transaction in all sectors and education by blended finance type, %



Source: Adapted from Convergence (2022)

Note: Bonds/notes are privately placed issuances and listed instruments on public exchanges. Companies consist of direct private equity and debt financing of businesses on both market rate and below market rate terms. Facilities consist of earmarked allocations of public development resources with additional private capital to be deployed to a specific recipient or intervention. Funds are limited partnership private equity and debt funds or funds-of-funds. Impact bonds are results-based financial contracts between an investor, an outcome funder, and a service provider to deliver social or environmental services. Projects include greenfield and brownfield projects, project finance, and programs funded through a combination of market rate and below market rate capital.

Funds and impact bonds are popular types of blended finance in education, with project-type transactions lagging behind overall trends. In the education sector, funds are the most used type of blended finance transaction, accounting for 56 percent of the total. While funds have a slightly lower share in the overall market, they are still the most frequently used type of blended financing transaction across all sectors. Notably, the share of impact bond transactions is significantly higher in the education sector, at 14 percent, than in the share in all sectors, which is only 2 percent. However, project-type transactions in the education sector make up only 6 percent of total transactions, which is considerably smaller than the 26 percent share of project-type transactions across all sectors (Figure 7).

2.2 Examples of Blended Finance in the Education and Other Sectors

Below are examples of blended financing arrangements: fund-type blended finance that are currently being used in the education sector and project-type blended finance in the other sectors.

2.2.1. Fund-type blended finance in the education sector

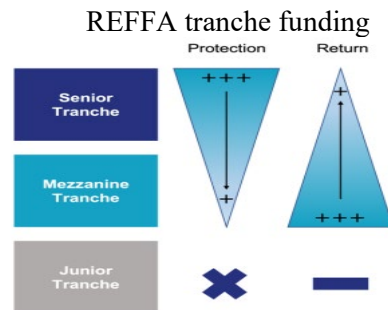
Most of the blended finance transactions in the education sector use funds, which is similar to the pattern in all other sectors (see Figure 7). Two types of funds are being used in the education sector. The first type consists of funds for which education is one investment area within a broader portfolio. The second type consists of funds that exclusively finance activities in the education sector. An example of a blended financing mechanism that is exclusively focused on education is the Regional Education Finance Fund Africa (REFFA) (see Box 7). Another example is USAID’s CATALYZE EduFinance program, launched in 2019 (USAID, 2020a). Funds like REFFA offer institutional investors opportunities to invest in the education sector, thereby enhancing their understanding of and confidence in this type of investment (Zelenczuk, 2021).

Box 7. Fund-type Blended Finance: the Regional Education Finance Fund Africa (REFFA)

REFFA brings together funding from DFIs and private investors. Launched in 2021 by the German Development Bank (KfW) financed by the German Federal Ministry for Economic Cooperation and Development (BMZ), REFFA is the first regional educational fund of its kind in Africa. Its goal is to provide equal access to secondary, vocational, and higher education, and thus have a positive impact on future generations.

REFFA operates by channeling funds, including debt investments and technical assistance, through local financial intermediaries called investees. These investees then provide support to education providers, students, and their families who are the end clients. As of September 2023, REFFA's total education finance portfolio amounted to over US\$172 million and was benefiting 3,163 education providers and 173,035 learners. The size of the loans, which are disbursed in local currency, has ranged from US\$0.5 million to 5 million.

The fund is divided into three tranches: junior, mezzanine, and senior. These consist of different risk-return profiles and provide private investors with favorable investment opportunities. REFFA also includes a technical assistance component designed to enhance the capacity of investees to conduct education lending, to provide market information and to foster innovation. Currently, the senior tranche is aimed at private investors. Investors in the mezzanine tranche are the UK's Development Finance Institution, British International Investment (BII), the Organization of the Petroleum Exporting Countries (OPEC) Fund for International Development (OFID), and BlueOrchard. Investment in the junior tranche is by the BMZ, represented by the German Development Bank (KfW). The technical assistance facility is managed by BlueOrchard and is supported by both public and private grant funds. Additionally, certain investors such as the BMZ in the junior tranche, the BII in the mezzanine tranche, and private investors have supplemented their investments in REFFA with donations to the technical assistance facility.



Sources: BlueOrchard (2022), Sugiyama and Thorne (2022), and www.reffa.org.

2.2.2. Project-type blended finance in the non-education sector

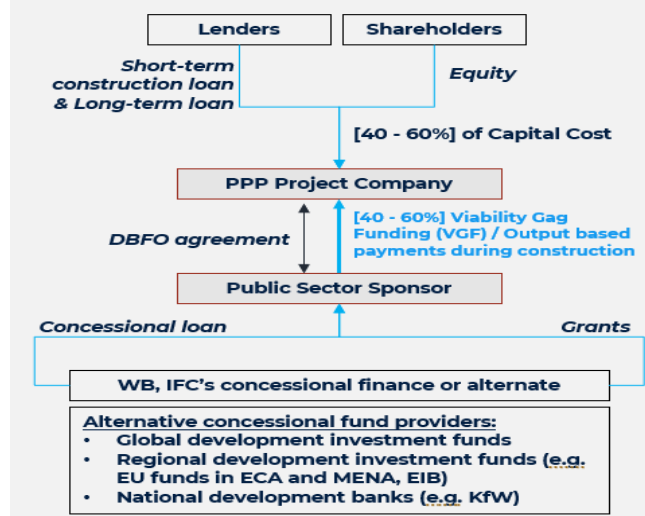
While project-type blended finance is the second most common forms of blended finance across all various sectors, it is less common in the education sector, as depicted in Figure 7. There also seems to be a room for increased participation by DFIs and MDBs whose current involvement in the education sector is much lower than in other sectors, as shown in Figure 5. It would be insightful to examine the ways in which DFIs and MDBs contribute to blended finance transactions in these other sectors to explore their potential to contribute more to education. The International Finance Corporation (IFC) is currently exploring the systematic use of the capital and operational expenditure subsidies model in PPPs. This approach is illustrated in Box 8.

Box 8. IFC's Hybrid PPP Capital Expenditure Subsidy Model

Where feasible and available, the International Finance Corporation (IFC) uses various types of hybrid PPP models to provide both capital expenditure (CAPEX) and output-based operation subsidies (in other words, subsidies to the unitary payment). These models involve the use of concessional funding provided to the public sector from sources such as the World Bank Group (WBG), global/regional international financial institutions (IFIs), and national development funds. The objective is to ensure the bankability of projects while bridging the affordability gap faced by developing country governments.

The IBRD's and IFC's hybrid PPP initiative aims to blend multiple sources of finance across sectors and countries. The primary goals of this approach are to leverage the most value out of private financing, maintain the key benefits of the PPP model, ensure the affordability of services both to the government and to end-users, generate opportunities for IBRD and IFC lending, and ultimately enable projects to happen. One example is the single project design-build-finance-operate (DBFO) delivery model, which has been used in waste management, port, healthcare, and water projects (IFC, 2024).

IBRD/IFC Hybrid PPP Capital Expenditure Subsidy Model



3. Challenges to Scaling Up Blended Finance in Education

Innovative financing approaches have tremendous potential for filling financing gaps in education, but so far, they have not lived up to expectations. What would it take to expand the use of blended finance in the education sector?

First, there is a need to make the case – again – for education. Spending on education is an investment in the future. From an economic viewpoint, it is an investment with high returns. While there is a need for individuals to forego current consumption to be able to afford to make the investment, the same holds true for countries. National spending on education is an investment in people. At the same time, it makes sense to find ways to increase the funds available to be invested in education, even if this requires debt financing. The enhanced production of human capital will increase economic value in the future. However, it is not sufficient to spend funds on expanding access alone. It is also imperative to improve the quality of the cognitive skills being produced. This is where blended finance comes in. By bringing in additional money from the private sector, blended financing puts an emphasis on results by structuring payments to providers and other stakeholders based on the achievement of outcomes.

Increased data availability, transparency, and clarity of terminology will be necessary to enhance the effectiveness of blended finance. Currently, little information is available on the size and structure of the blended finance market (OECD, 2020a), which means that more and better data and greater transparency by blended finance structures will be necessary (Attridge and Engen, 2019, Bayliss et al, 2020, and OECD, 2022). Moreover, in general, investments in education tend to require a considerable amount of time to generate returns. Additionally, there is a lack of clarity in the terminology used in this field, which can cause confusion and overlapping concepts, and make it difficult to generate reliable data. Clarifying the terms and definitions used for blended finance will be essential to ensure effective communication and mutual understanding within the blended finance community. For now, the lack of data means that it is unclear how to use blended finance effectively in the education sector of LICs (Roddis, 2020).

Education sector stakeholders face challenges in accessing private financing due to poor market conditions, investment environments, and sector risk profiles. As a result, banks, institutions, and individuals are hesitant to lend or invest in education businesses and projects in LICs and MICs. Barriers such as limited liquidity, high market volatility, exchange rate fluctuations, limited investment opportunities, and unfamiliarity among potential investors contribute to this situation (USAID, 2020b). Furthermore, inadequately educated and trained workers and significant infrastructure gaps in these countries compound these challenges (Sierra-Escalante et al, 2018). Conversely, there is a degree of skepticism within the education sector regarding the involvement of private investors in funding education, particularly regarding equitable access to education opportunities.

Institutional investors have typically shown a preference for mature and commercially viable sectors such as finance and energy rather than the social sectors, including the education sector. To attract more private financing in the education sector, the development community needs to use catalytic financing. In this approach, investors provide resources for development goals to an intermediary investment fund (a “fund of funds”) that pools resources and distribute risks among all investors as well as ensuring the fund’s viability to attract new investment (Convergence, 2022). These “funds of funds” then allocate their capital to various other investment funds, which then proceed to invest in a range of projects and companies (OECD, 2020b). However, a lot of capital is now focused on sectors associated with climate change, which diverts attention and resources away from education (Convergence, 2022). To aid the efforts to make education more bankable, more concessional financing may be needed at least initially.

IV. Considerations for Attracting the Private Sector into Blended Financing

Based on the discussion in the previous sections, there are several areas to focus on to attract more private capital into education spending through the use of blended financing.

Enhancing the understanding of blended finance and its impact among key stakeholders is crucial. Stakeholders such as governments, private investors, and DFI/MDBs need to see blended finance as a solution for narrowing financing gaps to improve learning outcomes. As a first step, they need to familiarize themselves with the concept of blended finance and understand key aspects such as additionality, impact, return, risks, and mitigation measures. Subsequently, they need to delve into the process of designing, preparing, and implementing blended finance initiatives, while also learning from existing applications of the approach to learn from any implementation challenges. In other words, the education sector needs to present more “bankable” projects – that is, designing them in a way that investors can see the route to progress towards the intended outcomes. This will require that more emphasis be put on measurement and

using the evidence base to finance the most effective initiatives. There will be a need to make the case that the education sector is viable and sustainable and that investing in education makes other investments more productive as skilled workers are needed to manage those investments. Also, an educated population will enhance climate resilience, mitigation, and adaptation efforts.

Assessing and strengthening the readiness of governments, DFIs, and MDBs to attract private investment is pivotal. The private sector is hesitant to invest in developing countries because of their poor market conditions. Therefore, to attract substantial private sector investment, governments of LICs need to be prepared to embrace blended finance, particularly in the education sector, by generating investable opportunities. This involves creating favorable investment conditions, implementing capacity building initiatives, and adopting a whole-of-government approach. Concrete steps in this direction would include evaluating market conditions, forming task forces among relevant ministries, and identifying specific sub-sectors for investment and viable blended financing mechanism in the local context. DFI/MDBs could assess their institutional mechanisms to allocate a portion of their funds for catalytic purposes while continuing to provide direct financial support to the education sector. DFI/MDBs could also actively collaborate with governments and private investors to increase countries' readiness to implement blended finance in education. They could provide grants and technical assistance to countries to help them to prepare to implement blended finance, including, for instance, to design investable projects.

Integrating blended finance into education funding will be essential. All stakeholders need to proactively plan for its future implementation and scale-up and ensure that it attracts considerable private investment in initiatives with a strong development impact. One approach would be to incorporate blended finance mechanisms into countries' national and sectoral development strategies and plans, the private sector's investment strategies, and donors' investment policies and plans. It will also be essential to assess the investment viability of the entire education sector and of particular sub-sectors such as ECD and TVET/higher education. It will be important for countries to consider the pros and cons of using various types of blended finance within their specific national settings. Going forward, all stakeholders should consider blended finance as key resource mobilization strategy to fund education. In addition, to optimize the effectiveness of blended finance, it will be important to avoid small and fragmented support as the market expands. As stated above, concessional financing may be needed to kick-start the process. It may also be necessary to try to maximize the use of guarantee mechanisms to mitigate the risks associated with private capital investments to continue to attract investors to blended finance initiatives in education.

References

- Arcia, G., A. Holloway, and A. Mulcahy-Dunn (2023). “Guide to public-private partnership in basic education.” USAID.
- Attridge, S. and L. Engen (2019). “Blended finance in the poorest countries: The need for a better approach.” Overseas Development Institute (ODI), London.
- Baum, D., and L. Lewis (2014). “What matters most for engaging the private sector in education: A framework paper.” SABER working paper series Number 8.
- Bayliss, K., B. Bonizzi, O. Dimakou, C. Laskaridis, F. Sial, and E. Van Waeyenberge (2020). “The use of development funds for de-risking private investment: How effective is it in delivering development results?” European Union.
- Bellinger, A., A. Terway, and N. Burnett (2016). “Innovative financing recommendations: International commission on financing global education.” Results for Development Institute, Washington DC.
- BlueOrchard (2022). “REFFA Impact Report 2021.” BlueOrchard Impact Investment Managers.
- Brookings Institution (2023). “Brookings Institution Global Impact Bond Database,” December 1, 2023.
- Burnett, N., and D. Birmingham (2010). “Innovative financing for education.” Education Support Program working paper series No 5. Open Society Institute.
- Cassimon, D., D. Essers, and R. Renard (2011). “An assessment of debt-for-education swaps. Case studies on swap initiatives between Germany and Indonesia and between Spain and El Salvador.” *Comparative Education* 47:2, 139-156.
- Chapman, B. (2016). “Income contingent loans in higher education financing.” *IZA World of Labor* 2016: 227.
- Chapman, B., and L. Dearden (2022). Income-contingent loans in higher education financing. Updated. *IZA World of Labor* 2022: 227.
- Convergence (2019). “The State of Blended Finance 2019.” Convergence: The Global Network for Blended Finance.
- Convergence (2022). “Blended Finance for Health and Education: Data Brief.” January 2022. Convergence: The Global Network for Blended Finance.
- Convergence (2023). “The State of Blended Finance 2023: Climate Edition.” Convergence: The Global Network for Blended Finance.
- Cruz, L. (2022). “Results-based financing and performance incentives in education: New evidence in the literature (English).” World Bank Group, Washington, D.C.
- Dar, A., S. Canagarajah, and P. Murphy (2003). “Training levies: Rationale and evidence from evaluations.” World Bank, Washington, D.C.
- Educational Initiative (2022). “Haryana early literacy development impact bond: Impact evaluation report.” Educational Initiative.
- Edwards, Sophie (2023). “Ghana launches \$30m education outcomes fund to get kids into school.” Devex Inside development. March 6, 2023. <https://www.devex.com/news/ghana-launches-30m-education-outcomes-fund-to-get-kids-into-school-105066>
- Elsby, A., R. Smith, L. Monk, and J. Ronicle (2022). “Using impact bonds in education in low- and middle-income countries: An evidence review.” World Bank, Washington, D.C.
- Filipp, R., and L. Lerer (2013). “Innovative financing for global education.” Education and Social Policy Working Paper Series. No. 58, World Bank, Washington, D.C.
- GPE (2023). “Factsheet: Debt2Ed.” Global Partnership for Education, Washington, D.C.

- GPOBA (2018). “A Guide for Effective Results-Based Financing Strategies (English).” Global Partnership on Output-Based Aid, World Bank Group, Washington, D.C.
- GPRBA (2023a). “Official launch of the \$30 million Ghana education outcomes project.” April 26, 2023. Global Partnership for Results-Based Approaches, World Bank, Washington, D.C. <https://www.gprba.org/news/official-launch-30-million-ghana-education-outcomes-project>
- GPRBA (2023b). “Annual Report 2023.” Global Partnership for Results-Based Approaches, World Bank, Washington, D.C.
- Hatashima, H. and U. Demberel (2020). “What is blended finance, and how can it help deliver successful high-impact, high-risk projects?” Independent Evaluation Group, World Bank, Washington, D.C. <https://ieg.worldbankgroup.org/blog/what-blended-finance-and-how-can-it-help-deliver-successful-high-impact-high-risk-projects>
- IBFC (2023). “India’s learning crisis: Role of blended finance in creating scalable and inclusive solutions.” India Blended Finance Collaborative.
- IFC (2024). “HES PPP go to market approach: Scaling health and education PPPs (SHEP), global platform and Hybrid PPP initiative.” International Finance Corporation, World Bank Group, Washington, D.C.
- IFFEd (2024). “How does it work?” International Finance Facility for Education. <https://iff-education.org/how-does-it-work/> Accessed on January 8, 2024.
- Ito, H., R. Sekiguchi, and T. Yamawake (2018). “Debt swaps for financing education: Exploration of new funding resources.” *Cogent Economics and Finance*, 6:1.
- Johanson, R. (2009). “A review of national training funds.” Social Protection Discussion Paper No.0922. World Bank, Washington, D.C.
- Language and Learning Foundation (2022a). “Press release: Pathbreaking initiative to improve children’s learning at scale.” Language and Learning Foundation, New Delhi.
- Language and Learning Foundation (2022b). “Strengthening foundational learning at scale: Haryana early literacy development impact bond (DIB).” Language and Learning Foundation, New Delhi.
- Lee, J.D., and O. Medina (2019). “Results-based financing in education: Learning from what works.” World Bank, Washington, D.C.
- Montenegro, C.E. and H.A. Patrinos (2023). “A data set of comparable estimates of the private rate of return to schooling in the World, 1970-2014.” *International Journal of Manpower* 44(6): 1248-1268.
- MIGA (2023). “Market finance for development: Taking stock.” Unlocking development finance note #1. Discussion Draft. Multilateral Investment Guarantee Agency, World Bank, Washington, D.C.
- OECD (2020a). “OECD DAC blended finance principles guidance.” Organization for Economic Cooperation and Development, Paris.
- OECD (2020b). “OECD DAC blended finance principle 1: Anchor blended finance use to a development rationale. Detailed guidance note.” Organization for Economic Cooperation and Development, Paris.
- OECD (2020c). “OECD DAC blended finance principle 4: Focusing on effective partnering for blended finance. Guidance note and detailed background guidance.” Organization for Economic Cooperation and Development, Paris.
- OECD (2022). “Making Private Finance Work for the SDGs.” Development Co-operation Directorate, Organization for Economic Cooperation and Development, Paris.
- OECD (2024). “Blended Finance.” <https://www.oecd.org/dac/financing-sustainable-development/blended-finance-principles/> Accessed on January 25, 2024. Organization for Economic Cooperation and Development, Paris.

- OECD and UNCDF (2019). “Blended Finance in the least developed countries 2019.” OECD and United Nations Capital Development Fund, OECD Publishing, Paris.
- OECD and UNCDF (2020). “Blended finance in the least developed countries 2020: Supporting a resilient COVID-19 recovery.” OECD and United Nations Capital Development Fund, OECD Publishing, Paris.
- Palmer, R. (2017). “Financing TVET in the East Asia and Pacific region: Current status, challenges and opportunities.” World Bank, Washington, D.C.
- Palmer, R. (2020). “A review of skills levy systems in countries of the southern African development community.” International Labour Organization, Geneva.
- Patrinos, H. (2023). “Designing effective public-private partnership in education.” Education for Global Development blog, January 10, 2023. World Bank, Washington, D.C.
- Patrinos, H.A., F. Barrera-Osorio, and J. Guáqueta (2009). “The role and impact of public-private partnerships in education.” World Bank, Washington, D.C.
- Psacharopoulos, G. and H.A. Patrinos (2018). “Returns to investment in education: a decennial review of the global literature.” *Education Economics* 26(5): 445-458.
- Roddis, S. (2020). “Blended finance in the non-state education sector.” United States Agency for International Development (USAID), Washington, D.C.
- Saravanamuttoo, N. and C. Shaw (1995). “Making debt work for education: How debt swaps can contribute to African education.” Association for the Development of Education in Africa (ADEA), African Development Bank Group (AfDB), Abidjan, Côte D’Ivoire.
- Social Finance India (2020). “Government of Haryana’s landmark ‘Pay for Success’ program.” Mumbai.
- Sierra-Escalante, K., A. Karlin, and M.L. Lauridsen (2018). “Blended concessional finance: Scaling up private investment in lower-income countries.” EMCompass Note 60. International Finance Corporation, World Bank Group, Washington, D.C.
- Sugiyama, H., and G. Thorne (2022). “Blended finance: The regional education finance fund for Africa.” NORRAG, Geneva.
- Tan, K., N.A. Samdin, and P. Lorinet (2021). “Social impact guarantees: The next evolution in outcomes-based funding.” *Stanford Social Innovation Review*, August 30, 2021.
- Tri-Sector Associates (2023). “Uplifting youth-at-risk through pay for success: The first social impact guarantee (SIG), October 2023.” Tri-Sector Associates, Singapore.
- UNESCO (2009). “Debt swaps for education.” UNESCO, Paris.
- UNESCO (2011). “Debt swaps and debt conversion development bonds for education: Final report for UNESCO advisory panel of experts on debt swaps and innovative approaches to education financing.” UNESCO, Paris.
- UNESCO (2021). “Global Education Monitoring Report 2021/2: Non-state actors in education: Who chooses? Who loses?” UNESCO, Paris.
- UNESCO (2022). “Global review of training funds: Spotlight on levy-schemes in 75 countries.” UNESCO, Paris.
- UNESCO (2023). “Global Education Monitoring Report 2023: Technology in education: A tool on whose terms?” UNESCO, Paris.
- USAID (2020a). “CATALYZE EduFinance: Mobilizing private capital for education.” United States Agency for International Development, Washington, D.C.
- USAID (2020b). “USAID invest blended finance starter kit: 10 questions about mobilizing private capital for better development results.” March 2020. United States Agency for International Development, Washington, D.C.

- Van de Veen, H. (2023). “Bridging the global education funding gap with outcome funds.” *ImpactInvestor Guide 2024*, November 2023 Issue #02.
- World Bank (2015). “Snapshot: The rise of results-based financing in education.” World Bank, Washington, D.C.
- World Bank (2019). “Uzbekistan: Promoting Early Childhood Development Project.” World Bank, World Bank, Washington, D.C.
- World Bank (2024). “Results-Based Financing (RBF) and Results in Education for All Children (REACH).” <https://www.worldbank.org/en/programs/reach>. World Bank, Washington, D.C.
- World Bank and UNESCO (2023). “Education Finance Watch 2023.” World Bank, Washington, D.C. and UNESCO, Paris.
- World Bank, UNESCO, and ILO (2023). “Building better formal TVET systems: Principles and practice in low- and middle-income countries.” World Bank, Washington, D.C., UNESCO, Paris, and ILO, Geneva.
- World Bank, UNESCO, UNICEF, FCDO, USAID, and Bill and Melinda Gates Foundation (2022). “The State of Global Learning Poverty: 2022 Update.”
- Writing Committee to the Taskforce on Innovative Financing for Education (2010). “2+3=8: Innovating in financing education.” Paris: Leading Group on Innovative Financing for Development.
- Zelenczuk, N. (2021). “Unlocking financing for investment into education.” Convergence: The Global Network for Blended Finance.

ABSTRACT

Despite efforts to generate more funds for education, current financing in the education sector is inadequate, inefficient, and inequitable to ensure quality education and improve learning outcomes. One way to fill the financing gap is “innovative finance,” which means not only sourcing new and additional funds but also spending these funds efficiently and effectively. Blended finance, one type of innovative finance, uses public funds to attract private capital to sustainable development projects by minimizing their risk. The use of blended finance has spread over the past decade in the energy sector for example, but there is scope for it to be applied more widely in the education sector.

